LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A tubular composite (1) comprising a braid (3) of ~~bundles and/or filaments or fibers of~~ an electron-conducting material and a layer (5) of an ion-conducting material arranged above it, ~~the tubular composite being produced by braiding of the bundles and/or filaments or fibers to form a hose comprising a braid of this electron-conducting material and subsequent application of the ion-conducting material to the outer side, which is remote from the lumen of the hose, of the braid and, if appropriate, drying~~ wherein the braid comprises:

(a) bundles of carbon fibers, or

(b) bundles of carbon fibers wherein individual bundles are replaced by metal wires, or

(c) bundles of carbon fibers wherein individual carbon fibers of the bundles are replaced by metal wire bundles, or

(d) bundles of carbon fibers wherein individual carbon fibers of the bundles are replaced by metal wires, or

(e) bundles of metal wires,

wherein the tubular composite is configured as a tube or hose and defines a cavity or lumen, which is enclosed by the braid, which lies toward the inside of the composite, and the layer, which faces toward the outside of the composite, wherein the composite has two end-side openings and wherein the lumen contains one or more metal wires oriented parallel to a longitudinal direction of the composite.

2. (Canceled)

3. (Currently amended) The tubular composite as claimed in claim 2, containing more than one metal wire in its lumen, in which the more than one metal wires (21) are in the form of a stranded conductor.

4. (Currently amended) The tubular composite as claimed in claim 1, in which the tubular composite (1) is designed as a fuel cell element, and ~~in each case~~ at least one catalyst layer (7, 9) is arranged both between the braid (3) of bundles and/or filaments or fibers of an electron-conducting material and the layer (5) of an ion-conducting material, and above the layer (5) of the ion-conducting material, and in which the outwardly oriented catalyst layer (9) is covered by a further braid (11) of bundles and/or filaments or fibers of an electron-conducting material.

5. (Currently amended) The tubular composite as claimed in claim [[1]] 4, in which the ~~in each case~~ at least one catalyst layer (7,9) contains one or more elements from subgroup VIII of the periodic ~~system~~ table of elements~~, if appropriate together with charcoal, soot or graphite~~.

6. (Currently amended) The tubular ~~composites~~ composite as claimed in claim 1, in which the at least one catalyst layer (7,9) comprises ~~hydrophobing~~ hydrophobic additives and/or additives of proton-conducting material.

7. (Previously presented) The tubular composite as claimed in claim 1, which is designed as an ion-exchange membrane.

8. (Currently amended) The tubular composite as claimed in claim 7, in which an ion-conductive or ~~neutral~~ electrically insulating spacer (13) is arranged between the braid (3) of bundles and/or filaments or fibers of an electron-conducting material and the layer (5) of an ion-conducting material.

9. (Original) The tubular composite as claimed in claim 8, in which a further spacer (15), which is covered by a further braid (17) of bundles and/or filaments or fibers of an electron-conducting material, is arranged above the layer (5) of an ion-conducting material.

10. (Currently amended) The tubular composite as claimed in claim [[8]] 9 , in which the further spacer (~~13~~,15) is designed as a braid of electrically insulating or ion-conducting fibers.

11. (Currently amended) The tubular composite as claimed in claim 1, in which the electron-conducting material is an electron-conducting woven support~~, in particular an electrode~~.

12. (Canceled)

13. (Canceled)

14. (Previously presented) The tubular composite as claimed in claim 1, in which the metal is a corrosion-resistant metal or a corrosion-resistant alloy.

15. (Currently amended) The tubular composite as claimed in claim 1, in which the carbon fibers and/or ~~filaments~~ <u>wires</u> have a diameter of from 10 to 300 μm.

16. (Previously presented) The tubular composite as claimed in claim 1, which is a hose with an internal diameter of 0.2 to 3 mm.

17. (Previously presented) The tubular composite as claimed in claim 1, in which the ion-conducting material is designed as a membrane.

18. (Currently amended) The tubular composite as claimed in claim 1, in which the ion-conducting material is selected from the group consisting of the sulfonated aromatic polyether ether ketones, <u>perfluorosulfonic acid polymer</u> ~~Nafion®~~ , ~~other~~ anionic polyaryl ethers and/or ~~other~~ sulfonated perfluorinated polymers.

19. (Currently amended) The tubular composite as claimed in claim 1, in which the ion-conducting material comprises an oxide~~, in particular a solid oxide~~.

20. (Currently amended) A module (50) comprising a frame (52) ~~, which is preferably of cylindrical design,~~ and a multiplicity of tubular composites (1) as claimed in claim 1, which are arranged in the frame (52) parallel and longitudinally with respect to the longitudinal axis of the frame (52).

21. (Original) the module as claimed in claim 20, in which the braid is in electrically conductive contact with an electron-conducting device.

22. (Original) The module as claimed in claim 21, in which the braid (11, 17) which faces the <u>outer</u> surface of the tubular composite (1) is in electrically conductive contact with an outer connection (31).

23. (Previously presented) The module as claimed in claim 20, in which the braid (3) which faces the lumen (19) of the tubular composite (1) is in electrically conductive contact with one or more metal wires (21).

24. (Previously presented) The module as claimed in claim 20, in which tubular composites (81), which are connected electrically in parallel, are contained in the frame (52).

25. (Previously presented) The module as claimed in claim 20, in which the tubular composites (1) are arranged in a matrix (54) in the frame (52), and the individual frames are electrically connected in series.

26. (Currently amended) A reactor, containing at least ~~on~~ <u>one</u> module as claimed in claim 20 and a housing.

27. (Original) the reactor as claimed in claim 26, which contains at least two modules which are electrically connected in series or in parallel to one another.

28. (Currently amended) A method for the continuous production of a tubular composite~~, in particular~~ as claimed in claim 1, in which bundles and/or filaments or fibers of an electron-conducting material are braided to form a hose from a braid of this electron-conducting material, and then an ion-conducting material is applied to the outer side of the braid, which is remote from the lumen of the hose~~, and if appropriate is dried~~.

29. (Currently amended) The method as claimed in claim 28 for producing a tubular composite which is designed as a fuel cell element, ~~in each case~~ wherein at least one catalyst layer ~~being~~ is applied to the hose ~~and, if appropriate, dried after the braiding of the hose and also after the application of the ion-conducting material,~~ and then a further braid of bundles and/or filaments or fibers of an electron-conducting material ~~then being~~ is then applied to the outwardly oriented catalyst layer~~, preferably by braiding carbon-fiber bundles and/or metal wires~~.

30. (Currently amended) The method as claimed in claim 28 [[,]] for producing a tubular composite which is designed as an ion exchange membrane, wherein bundles and/or filaments or fibers of an electron-conducting material ~~being~~ are braided to form a hose from a braid of ~~this~~ the electron-conducting material, ~~then~~ following which a braid of electrically insulating or ion-conducting fibers ~~being~~ are applied as a spacer, followed by ~~an intermediate layer of a material which can easily be washed out~~ a temporary intermediate layer which serves as a base for application of an ion-conducting layer, and then a layer of an ion-conducting material ~~being~~ applied to this intermediate layer.

31. (Currently amended) The method as claimed in claim [[28]] 30, in which the temporary intermediate layer ~~intermediate layer comprsing a material which can easily be washed out~~ is a PVA (polyvinyl alcohol) layer.

32. (Previously presented) The method as claimed in claim 28, in which a further braid of electrically insulating or ion-conducting fibers is applied as a spacer to the layer of ion-conducting material, and then a further layer of an electron-conducting material is applied.

33. (Currently amended) The method as claimed in claim [[28]] 30, in which the ~~intermediate layer made from a material which can easily be washed out~~ temporary intermediate layer is washed out after the tubular composite has been produced or after ~~the~~ individual hollow fibers have been joined to form a module.

Add the following new claims:

34. (New) The tubular composite as claimed in claim 5, in which the at least one catalyst layer (7,9) additionally contains at least one of charcoal, soot and graphite.

35. (New) The tubular composite as claimed in claim 11, wherein the electron-conducting material is an electrode.

36. (New) The tubular composite as claimed in claim 1, in which the bundles of carbon fibers have a diameter of from 0.1 to 2 mm.

37. (New) The tubular composition as claimed in claim 36, wherein the bundles of carbon fibers have a diameter of from 0.2 to 2 mm.

38. (New) The tubular composite as claimed in claim 19, in which the ion-conducting material comprises a solid oxide.

39. (New) The module as claimed in claim 20, wherein the frame (52) is of cylindrical design.

40. (New) The method of claim 28, which further comprises drying the ion-conducting material applied to the outer side of the braid.

41. (New) The method as claimed in claim 29, which further comprises drying the at least one catalyst layer.

42. (New) The method as claimed in claim 41, wherein the at least one catalyst layer is dried after at least one of braiding of the hose and after the application of the ion-conducting material.